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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,265	09/10/2003	Raymond Poynor	20003.0067	4006
23517	7590	04/07/2004	EXAMINER	
SWIDLER BERLIN SHEREFF FRIEDMAN, LLP			PASSANITI, SEBASTIANO	
3000 K STREET, NW			ART UNIT	
BOX IP			PAPER NUMBER	
WASHINGTON, DC 20007			3711	

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/658,265	POYNOR, RAYMOND	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sebastiano Passaniti	3711	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 26-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 34-41 is/are allowed.
- 6) ☒ Claim(s) 26-31, 33 and 42-45 is/are rejected.
- 7) ☒ Claim(s) 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

This Office action is responsive to communication received 09/10/2003 – Preliminary Amendment.

This application is a DIV of 09/882,259, filed 06/18/2001, now U.S. Pat. No: 6,623,376.

Claims 1-25 have been canceled, as directed.

Claims 26-45 remain pending.

Following is an action on the MERITS:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26-31, 33 and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda in view of Funk. The patent to Takeda differs from the claimed invention in that Takeda does not specifically reference a residual compressive stress and does not specifically reference removing a substantial amount of alpha case from the inner surface of the front face. Note, Takeda recognizes that the use of a cover (17) eliminates the need for a shot blasting process to remove the cutter marks on the interior of the cavity. However, if the skilled artisan had desired to remove the cover in the Takeda device along with its associated function, one skilled in the art would have realized that shot blasting of the inner cavity surface would have been desirable in order to remove unsightly cutter marks. See col. 4, lines 58-65 in Takeda. With respect to

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claims 27-28, as Takeda indicates that cutter marks are present on the interior of the cavity and since the entire inner surface of the cavity is formed by a milling process, it is clear that the entirety of the inner surface of the cavity includes cutter marks. Thus, at least 60% and most likely more than 80% of the portion that contains cutter marks makes up the front face (see Figure 1 in Takeda). Specific to claims 31, 31, 33 and 42-45, the teaching reference to Funk not only details that the exterior surface of a golf club head may be shot peened, but also indicates that said peening operation leaves a residual compressive stress that increases the hardness of the club head material without a visible change in the appearance of the head material (col. 1, lines 10-35 along with col. 2, lines 1-10 and col. 2, lines 37-45 in Funk). If the Takeda reference had been modified as discussed above, the teachings advanced by Funk would have led the skilled artisan to further modify the Takeda device to not only peen the outer surface, but also peen the cavity behind the striking face, the motivation being to harden the surface of the head to improve the feel of the club head. The specifics of claim 44 and 45 are not deemed critical, as Funk indicates that the stress profile of the club depends on the intensity and shot size associated with the peening operation (col. 2, lines 49-56). Peening will necessarily alter the thickness of the material that is being peened. Thus, the claimed thickness requirements and the claimed residual compressive stress value are deemed to be factors influenced by the actual processing parameters; said factors able to be altered to suit the characteristics of an individual golfer based on the feel of the club.

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Claim 42 is objected to because of the following informalities: In line 6, should not "competitive" read --compressive--? Appropriate correction is required.

Claims 34-41 appear to be allowable over the prior art references of record.

Claim 32 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

All references cited during prosecution of applicant's parent file 09/882,259 are deemed pertinent to this application and are incorporated herein by reference.


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note col. 8, lines 35-40 in Tselesin. See Figure 7 in MacIntyre. Kawanami shows a shot method, of interest. Both JP-0105444 and JP 09035547 show blasting treatments for a club head. Lee shows shot blasting for a club head. Hester and Shira discuss residual compressive stress. Oyama details alpha and beta titanium materials. See col. 2, line 54 through col. 3, line 6 in Calboreanu.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is 703-308-1006. The examiner can normally be reached on Mon-Fri (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sebastiano Passaniti  
Primary Examiner  
Art Unit 3711

S.Passaniti/sp  
April 5, 2004